LANE REGIONAL AIR PROTECTION AGENCY
TITLE V OPERATING PERMIT
REVIEW REPORT

1010 Main St.
Springfield, OR 97477

Weyerhaeuser NR Company – Eugene EWP **Permit No. 208256**
195 North Bertelsen Road
Eugene, Oregon 97402
Website: https://www.weyerhaeuser.com/

Source Information:

Primary SIC	2439
Secondary SIC	
Primary NAICS	321215
Secondary NAICS	

Source Categories (LRAPA Title 37, Table 1)	B.45: Millwork (structural wood members)
Public Notice Category	III

Compliance and Emissions Monitoring Requirements:

Unassigned Emissions	Yes
Emission Credits	
Compliance Schedule	
Source Test Date(s)	

COMS	
CEMS	
Ambient Monitoring	

Reporting Requirements

Annual Report (due date)	March 15
Semi-Annual Report (due date)	August 15
Greenhouse Gas (due date)	March 31
Monthly report (due dates)	

Quarterly report (due dates)	
Excess Emissions Report	Yes
Other reports	

Air Programs

NSPS (list subparts)	
NESHAP (list subparts)	A, DDDD, DDDDD
40 CFR part 64 Compliance Assurance Monitoring (CAM)	Yes
Regional Haze (RH)	
TACT	
40 CFR part 68 Risk Management	
Cleaner Air Oregon (CAO)	
Synthetic Minor (SM)	

SM-80	
Title V	Yes
Major FHAP Source	Yes
Federal Major Source	
Type A State New Source Review	
Type B State New Source Review	
Prevention of Significant Deterioration (PSD)	
Nonattainment New Source Review (NNSR)	

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LIST OF ABBREVIATIONS USED IN THIS REVIEW REPORT

ACDP	Air Contaminant Discharge Permit
Act	Federal Clean Air Act
ASTM	American Society of Testing and Materials
BDT	Bone dry ton
BDU	Bone dry unit
BF	Board feet
Btu	British thermal unit
CEMs	Continuous emission monitoring system
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CPMS	Continuous parameter monitoring system
Day	A calendar 24-hour period
DEQ	Department of Environmental Quality
dscf	Dry standard cubic feet
EF	Emission factor
EPA	US Environmental Protection Agency
ERC	Emission Reduction Credit
EU	Emissions Unit
FCAA	Federal Clean Air Act
FSA	Fuel sampling and analysis
GHG	Greenhouse Gas
gr/dscf	Grain per dry standard cubic foot (1 pound = 7000 grains)
HAP	Hazardous Air Pollutant as defined by OAR 244-0040
HCFC	Halogenated Chloro-Fluoro-Carbons
HCOH	Formaldehyde
ID	Identification number
I&M	Inspection and maintenance
LRAPA	Lane Regional Air Protection Agency
M	1,000
MM	1,000,000
Month	Calendar month
MB	Material Balance
MBF	1,000 Board feet
MSF	1,000 Square feet 3/8" basis
MSDS	Material Safety Data Sheets
MeOH	Methanol
NA	Not applicable
NO_x	Nitrogen oxides
NESHAP	National Emission Standard for Hazardous Air Pollutant
NSPS	New Source Performance Standards
NSR	New Source Review
O_2	Oxygen
OAR	Oregon Administrative Rules
ODEQ	Oregon Department of Environmental Quality
ORS	Oregon Revised Statutes
O&M	Operation and maintenance
PF	Phenol-Formaldehyde
Pb	Lead
PCD	Pollution Control Device
PM	Particulate matter
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
ppmv	Parts per million by volume
ppm	Parts per million
PSEL	Plant Site Emission Limit
psia	Pounds per square inch, actual
RTO	Regenerative Thermal Oxidizer
SCHED	Schedule
SERP	Source emissions reduction plan
SPEC	Special
SO_2	Sulfur dioxide
ST	Source test
TPY	Tons per year, (short ton=2000 lbs)
VE	Visible emissions
VMT	Vehicle miles traveled
VOC	Volatile organic compounds
Week	Calendar week starting at 12:01 am on Sunday morning
Year	A period consisting of any 12-consecutive calendar months

INTRODUCTION

1. Weyerhaeuser NR Company – Eugene EWP ("Weyerhaeuser", "facility", or "source") is an existing facility applying for a renewal of an existing Title V Operating Permit. Upon issuance, the renewed permit will be valid for five (5) years.

    1.a. Information relied upon: The renewed Title V Operating Permit is based upon application no.71206 received December 18, 2024.

2. In accordance with OAR 340-218-0120(1)(f), this review report is intended to provide the legal and factual basis for the draft permit conditions. In most cases, the legal basis for a permit condition is included in the permit by citing the applicable regulation. In addition, the factual basis for the requirement may be the same as the legal basis. However, when the regulation is not specific and only provides general requirements, this review report is used to provide a more thorough explanation of the factual basis for the draft permit conditions.

FACILITY DESCRIPTION

3. The Weyerhaeuser NR Company – Eugene EWP plant receives dry veneer from outside suppliers. In the Laminated Veneer Lumber (LVL) presses, the prepared veneer is subjected to glue, heat, and pressure creating an LVL billet. Some of the LVL billets are transferred to the I-joist department where they are made into flanges for I-joists. Following this I-joist fabrication process, the I-joists are heat cured in an oven. Once cured, they are cut to length and shipped to market. The remaining LVL billets not destined for I-joist flanges are transferred to a secondary manufacturing department in the plant where they are ripped into a variety of widths and lengths for shipment to market as well. Wood residuals are generated throughout the manufacturing process and collected by way of a pneumatic system controlled by baghouses. Pollutants emitted from the manufacturing processes include NO_X, CO, VOC, GHGs, and PM/PM_{10}/$PM_{2.5}$ from gas combustion, VOCs (primarily methanol, formaldehyde, and phenol) from glue curing in the LVL presses and I-joist oven, and PM/PM_{10}/$PM_{2.5}$ from wood residual handling.

4. The facility operates under the primary Standard Industrial Classification (SIC) code of 2439 – Structural Wood Members, Not Elsewhere Classified and the primary North American Industry Classification System (NAICS) code of 321215 – Engineered Wood Member Manufacturing.

5. The facility is located in a topographically flat area. To the north of the facility there is a mixed industrial, commercial and residential area. To the east of the facility is a heavy industrial area, including a chromium plating facility and wood preserving operation. To the south of the facility is a mixed industrial and commercial area. To the west of the facility is a light commercial area and the Randy Papé Beltline (OR 569).

6. The facility is located in an area that has been designated as attainment or unclassified for all criteria pollutants. The facility is located inside the Eugene-Springfield Urban Growth Boundary as defined in LRAPA 29-0010 which designates the Eugene-Springfield CO and PM10 maintenance areas. The facility is located within 100 kilometers of three Class I air quality protection areas: Diamond Peak Wilderness, Mount Washington Wilderness, and Three Sisters Wilderness.

GENERAL BACKGROUND INFORMATION

7. The facility is a Title V major source because potential emissions of individual HAP (methanol) are greater than 10 tons per year and potential emissions of aggregate HAP are greater than 25 tons per year.

8. LRAPA has reviewed and issued the following permitting actions to this facility since the last permit renewal on January 12, 2021.

Date Reviewed/ Approved	Permit Action Type	Description
06/23/2021	Approval to Construct NC-208256-A21	Approval to Construct for the installation of a 0.507 MMBtu/hr natural gas fired industrial power washer.
04/10/2023	Approval to Construct NC-208256-A23	Approval to Construct for the upgrade of the natural gas burners for the hot oil system in EU: Press Heaters
09/26/2023	Addendum No. 1 (Significant Permit Modification)	Amendment to change the facility name from "Weyerhaeuser NR Company – Eugene, OR ELP" to "Weyerhaeuser NR Company – Eugene EWP" and reduce the tune-up frequency of the process heaters due to the installation of an oxygen trim system.

EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION

9. The emissions units regulated by the permit are the following:

Emission Unit ID	Emission Unit Description	Pollution Control Device Description (PCD ID)	Installed / Last Modified
WRH	Wood Residual Handling System	Baghouses: BH-1	Installed 1990
		BH-2	Installed 1979
		BH-3	Installed 2016
Presses	Laminated Veneer Lumber (LVL) Presses:		
	4	NA	2001
	4-18	NA	2015
	4-19	NA	2016
	4-20	NA	2017
Presses	Future Laminated Veneer Lumber (LVL) Press ID #'s TBD	NA	NA
I-Line	I-Line Process	NA	1972
I-Oven	I-Line Oven	NA	1981
Press Heaters	Press Heaters	NA	2001
WSO	Future Water Shed Overlay	NA	NA
AI	Aggregate Insignificant – includes: Carpentry Shop ($PM/PM_{10}/PM_{2.5}$) Fire Suppression Abort ($PM/PM_{10}/PM_{2.5}$) Misc. Hand Tool Use ($PM/PM_{10}/PM_{2.5}$) Press Lube Emissions ($PM/PM_{10}/PM_{2.5}$) Sawdust Dumpsters ($PM/PM_{10}/PM_{2.5}$) Billet Reclaim Saw ($PM/PM_{10}/PM_{2.5}$) Misc. Inks (VOC) Misc. Adhesive Usage (VOC) Misc. Aerosol Paint Cans (VOC) Misc. Thinner (VOC) Misc. Enamel Paint (VOC)	NA	NA

10. Wood Residual Handling System (WRH): The wood residual handling system consists of several material handling cyclones, each of which vents to one of three (3) baghouses: BH-1, BH-2, and BH-3. BH-1 was manufactured by Western Pneumatics with an 8:1 design air to cloth ratio, 630 bags, sweep arm cleaning mechanism, and was installed in 1990. BH-2 was manufactured by Carothers with a 4.8:1 design air to cloth ratio, 460 bags, sweep arm cleaning mechanism, and was installed in 1979. BH-3 was manufactured by Western Pneumatics Inc. with a 5.75:1 design air to cloth ratio, 512 bags, sweep arm cleaning mechanism, and was installed in 2016. The wood residuals are blown to overhead truck bins which emit fugitive particulate matter when material is transferred to wood residual trucks.

11. Presses 4, 4-18, 4-19, and 4-20 (Presses): Three new, 4-ft wide LVL presses have been installed since starting a press replacement project in the last quarter of 2014. The new presses and their dates of installation are the following: Press 4-18 was installed in 2015, Press 4-19 was installed in 2016, and Press 4-20 was installed in 2017. One of the original presses has remained since the replacement project began. The remaining press is Press 4, which was installed in 2001.

    11.a. Future Presses (Press numbers to be assigned after construction): The press replacement project construction began in the last quarter of 2014, with the first LVL press installation beginning in March 2015. Although the original project plan called for the construction/installation of one 4-ft wide LVL press every year and was scheduled for completion in 2019, the current LVL press project plan is to install up to two more presses and is scheduled for completion in 2028. There are two possible installation scenarios for the additional LVL presses. One scenario would be to replace the remaining 2-ft wide LVL press (Press 4) with two, 4-ft wide LVL presses. The other installation scenario would be to install one 4-ft wide LVL press and then rebuild the existing 2-ft wide LVL press (Press 4). Although the total number of presses and their individual widths may vary, the PSELs in the permit are based off 14,927,040 cubic feet of LVL production per year which accounts for this operation variability.

    11.b. Removed Presses 1, 2, 3, 5, 7, 8 and 9 (Presses): Press 1 was installed in 2004 and Press 3 was installed in 2000, both of which were removed in March 2020. The following presses, with installation dates, have also been removed as part of the press replacement project: Press 2 installed in 2000, Presses 5 and 8 installed in 2001, and Presses 7 and 9 installed in 1999.

12. Future Water Shed Overlay (WSO): The permit allows for the facility to apply a phenolic resin impregnated paper to the top and bottom of billet surfaces of the LVL that will only be used on headers. This paper and its application on the LVL billets is referred to as water shed overlay (WSO). The WSO is applied at the infeed of the LVL press. Heat and pressure from the press causes the paper to adhere to the wood substrate of the LVL billet.

13. I-Line: Adhesive is applied to web and flange material to manufacture structural I-joists. The process was installed in 1972 and has a maximum rated design capacity of 328,000 pounds of adhesive used per month.

14. Press Heaters: Installed in 2001, the two (2) natural gas-fired process heaters are part of a thermal hot oil system. The name plate on each heater indicates a maximum heat input rate of 9,999,999 Btu/hr, but a specific heat rating provided by the manufacturer (Heatec) in 2013 indicates a specific maximum heat rating of 9.4 MMBtu/hr. An oxygen trim system was installed in 2023.

15. I-Line Oven (Oven): Natural gas burners heat the Oven chamber to cure the adhesive in newly manufactured I-joists. The original Oven was installed in 1973 but later replaced in 1981 by a new Oven. The current Oven has two Maxon natural gas burners each with a rated design capacity of 3.8 MMBtu/Hour that both directly fire the Oven. The Oven, including both its burners, is a PCWP MACT affected source.

16. Aggregate Insignificant (EU-AI): Aggregate Insignificant includes activities described below (see Item 0 for the estimated emissions associated with each activity):

Carpentry Shop ($PM/PM_{10}/PM_{2.5}$)
Fire Suppression Abort ($PM/PM_{10}/PM_{2.5}$)
Misc. Hand Tool Use ($PM/PM_{10}/PM_{2.5}$)
Press Lube Emissions ($PM/PM_{10}/PM_{2.5}$)
Sawdust Dumpsters ($PM/PM_{10}/PM_{2.5}$)
Billet Reclaim Saw ($PM/PM_{10}/PM_{2.5}$)
Misc. Adhesive Usage (VOC)
Misc. Aerosol Paint Cans (VOC)
Misc. Thinner (VOC)
Misc. Enamel Paint (VOC)
Misc. Inks (VOC)

CATEGORICALLY INSIGNIFICANT ACTIVITIES:

17. The facility has the following categorically insignificant activities on site**:**

17.a. Evaporative and tail pipe emissions from on-site motor vehicle operation

17.b. Distillate oil, kerosene, and gasoline, natural gas or propane burning equipment, provided the aggregate expected actual emissions of the equipment identified as categorically insignificant do not exceed the de minimis level for any regulated pollutant, based on the expected maximum annual operation of the equipment.

17.c. Any individual distillate oil, kerosene or gasoline burning equipment with a rating greater than 0.4 million Btu/hour;

17.d. Any individual natural gas or propane burning equipment with a rating greater than 2.0 million Btu/hr;

17.e. Distillate oil, kerosene, gasoline, natural gas or propane burning equipment brought on site for six months or less for maintenance, construction or similar purposes, such as but not limited to generators, pumps, hot water pressure washers and space heaters, provided that any such equipment that performs the same function as the permanent equipment, must be operated within the source's existing PSEL

17.f. Office activities

17.g. Janitorial activities

17.h. Groundskeeping activities including, but not limited to building painting and road and parking lot maintenance

17.i. Maintenance and repair shop

17.j. Automotive repair shops or storage garages

17.k. Air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment

17.l. Refrigeration systems with less than 50 pounds of charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems.

17.m. Temporary construction activities

17.n. Warehouse activities

17.o. Accidental fires

17.p. Air vents from air compressors

17.q. Electrical charging station

17.r. Fire Brigade Training

17.s. Fire suppression

17.t. Routine maintenance, repair, and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use, and woodworking

17.u. Electric motors

17.v. Storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids

17.w. On-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles

17.x. Natural gas, propane, and liquefied petroleum gas (LPG) storage tanks and transfer equipment

17.y. Pressurized tanks containing gaseous compounds

17.z. Vacuum sheet stacker vents

17.aa. Emissions from wastewater discharges to publicly owned treatment works (POTW) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities

17.bb. Fire suppression and training

17.cc. Paved roads and paved parking lots within an urban growth boundary

17.dd. Hazardous air pollutant emissions of fugitive dust from paved and unpaved roads, except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils

17.ee. Health, safety, and emergency response activities

17.ff. Oil/water separators in effluent treatment systems

17.gg. Combustion source flame safety purging on startup

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING, AND RECORDKEEPING

Nuisance, Deposition, and Other Emission Limitations

18. Under LRAPA 49-010(1), the permittee must not cause or allow air contaminants from any source subject to regulation by LRAPA to cause a nuisance. Compliance is demonstrated through documentation of all complaints received by the facility from the general public and following procedures to notify LRAPA of the receipt of these complaints.

19. Under LRAPA 32-055, the permittee must not cause or permit the emission of particulate matter which is larger than 250 microns in size at sufficient duration or quantity as to create an observable deposition upon the real property of another person. Compliance is demonstrated through documentation of all complaints received by the facility from the general public and following procedures to notify LRAPA of the receipt of these complaints.

20. Under LRAPA 32-090(1), the permittee must not discharge from any source whatsoever such quantities of air contaminants which cause injury or damage to any persons, the public, business or property; such determination is to be made by LRAPA. Compliance is demonstrated through documentation of all complaints received by the facility from the general public and following procedures to notify LRAPA of the receipt of these complaints.

Emission Limitations and Monitoring

Emission Unit WRH: Wood Residual handling System

21. Emission Unit WRH is subject to the visible emission limitations under subsection 32-010(2)&(3). For sources, other than wood-fired boilers, no person may emit or allow to be emitted any visible emissions that equal or exceed an average of 20 percent opacity. Compliance is demonstrated through a survey of visible emissions from Emission Unit WRH using EPA Method 22 or EPA Method 9 to be completed at monthly. The permittee is required to take corrective action if any visible emissions are identified and contact LRAPA or conduct an EPA Method 9 test if the visible emissions cannot be eliminated.

22. The baghouses in Emission Unit WRH are subject to particulate matter emission limitations under subparagraph 32-015(2)(b)(A). For sources installed, constructed, or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are not representative compliance source test results, the particulate matter emission limit is 0.10 grains per dry standard cubic foot if all representative compliance source test results prior to April 16, 2015 demonstrate that emissions are no greater than 0.080 grains per dry standard cubic foot. Compliance is demonstrated through a survey of visible emissions using EPA Method 22 or EPA Method 9 to be completed at least quarterly for Emission Unit WRH. The permittee is required to take corrective action if any visible emissions are identified and contact LRAPA or conduct an EPA Method 9 test if the visible emissions cannot be eliminated.

23. Emission Unit WRH is subject to the operation, maintenance, and work practice requirements under subsection 32-007(1). The following operation, maintenance and/or work practice controls have been established by permit conditions:

    23.a. The permittee must exhaust the particulate matter emissions from Emissions Unit WRH to a cyclone, target box, and/or baghouse whenever the associated milling equipment in this process is operating. The permittee must operate, maintain, and monitor all pollution control devices associated with Emission Unit WRH to ensure emission reduction is at the highest reasonable efficiency and effectiveness. Compliance is demonstrated by the following:

        23.a.i. Operation, maintenance, and calibration of monitoring devices to measure the pressure drop across each baghouse. If the pressure drop across a baghouse deviates from the range specified in the permit, the permittee must take corrective action to return the pressure drop to the specified operating range.

24. The baghouses in Emission Unit WRH are subject to the process weight rate emission limitations under subsection 32-045(1) for any emission unit that has the potential to emit particulate matter. No person may cause, suffer, allow, or permit the emissions of particulate matter in any one (1) hour from any process in excess of the amount shown in section 32-8010, for the process weight rate allocated to such process. Process weight is the total weight of all materials introduced into a piece of process equipment. Liquid and gaseous fuels and combustion air are not included in the total weight of all materials. Compliance is demonstrated through a survey of visible emissions using EPA Method 22 or EPA Method 9 to be completed at least quarterly for Emission Unit WRH. The permittee is required to take corrective action if any visible emissions are identified and contact LRAPA or conduct an EPA Method 9 test if the visible emissions cannot be eliminated.

Emission Unit Presses, I-Line, and I-Oven: Laminated Veneer Lumber (LVL) Presses, I-Line Process, and I-Line Oven

25. Emission Unit Presses, I-Line, and I-Oven are subject to the visible emission limitations under subsection 32-010(3). For sources, other than wood-fired boilers, no person may emit or allow to be emitted any visible emissions that equal or exceed an average of 20 percent opacity. Compliance is demonstrated through a survey of visible emissions using EPA Method 22 or EPA Method 9 to be completed at least quarterly for Emission Unit Presses, I-Line, and I-Oven. The permittee is required to take corrective action if any visible emissions are identified and contact LRAPA or conduct an EPA Method 9 test if the visible emissions cannot be eliminated.

Emission Unit Press Heaters: Press Heaters

26. Emission Unit Press Heaters is subject to the visible emission limitations under subsection 32-010(3). For sources, other than wood-fired boilers, no person may emit or allow to be emitted any visible emissions that equal or exceed an average of 20 percent opacity. Compliance is demonstrated through a survey of visible emissions using EPA Method 22 or EPA Method 9 to be completed at least quarterly for Emission Unit Presses, I-Line, and I-Oven. The permittee is required to take corrective action if any visible emissions are identified and contact LRAPA or conduct an EPA Method 9 test if the visible emissions cannot be eliminated.

27. Emission Unit Press Heaters is subject to 40 CFR 63 Subpart DDDDD. For each device in emissions unit Press Heaters, the permittee must conduct a tune-up of the process heater every 5 years to demonstrate continuous compliance. Each tune-up must be conducted no more than 61 months after the previous tune-up. The permittee must keep records including a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

<u>Typically Achievable Control Technology (TACT)</u>

28. Subsection 32-008(1) requires an existing unit at a facility prior to January 1, 1994, to meet TACT if the emission unit meets the following criteria: The emission unit is not already subject to emission standards for the regulated pollutant under title 30, title 33, title 38, or title 46 at the time TACT is required; the source is required to have a permit; the emission unit has emissions of criteria pollutants equal to or greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant; and LRAPA determines that air pollution control devices and emission reduction processes in use for the emissions do not represent TACT and that further emission control is necessary to address documented nuisance conditions, address an increase in emissions, ensure that the source is in compliance with other applicable requirements, or to protect public health or welfare or the environment.

    28.a. The following emission units are not subject to TACT because they do not have emissions equal to or greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant: Emission Units I-Line, and I-Oven.

29. Subsection 32-008(2) requires new units installed or existing emission units modified on or after January 1, 1994, meet TACT if the emission unit meets the following criteria: The emission unit is not subject to Major NSR or Type A State NSR in title 38, and applicable NSPS in title 46, or any other standard applicable to only new or modified sources in title 30, title 33, title 39, or title 46 for the regulated pollutant; the source is required to have a permit; if new, the emission unit has emissions of any criteria pollutant equal to or greater than one (1) ton per year of any criteria pollutant; if modified, the emission unit would have an increase in emissions of any criteria pollutant equal to or greater than one (1) ton per year; and LRAPA determines that the proposed air pollution control devices and emission reduction processes do not represent TACT.

29.a. The existing and modified Wood Residual Handling System consists of a number of emission units merged together for convenience of regulation. Most of the emission units included under the Wood Residual Handling System category will not have emissions of any criteria pollutant equal to or greater than one (1) ton per year. The emissions from the truck loading will have emissions of particulate matter equal to or greater than one (1) ton per year. While LRAPA has not performed a formal TACT determination for particulate matter from this emission unit, LRAPA has determined that the baghouse control devices associated with this process likely meet TACT.

29.b. Press Heaters will have potential emissions of CO and NO_x equal to or greater than one (1) ton per year. While LRAPA has not performed a formal TACT determination for CO and NO_x from this emission unit, EPA and LRAPA have determined that there are no control technologies currently used in practice or economically feasible for these Press Heaters. TACT is considered to be current operations.

29.c. The existing Laminated Veneer Lumber Presses have emissions of VOC equal to or greater than one (1) ton per year. While LRAPA has not performed a formal TACT determination for VOC from these emission units, EPA and LRAPA have determined that there are no control technologies currently used in practice or economically feasible for these Laminated Veneer Lumber Presses. TACT is considered to be current operations

29.d. The following emission unit is not subject to TACT because it does not have emissions greater than one (1) ton per year of any criteria pollutant: Emission Unit AI.

EMISSION LIMITS FOR INSIGNIFICANT ACTIVITIES

30. As identified earlier in this Review Report, this facility has insignificant emissions units (IEUs) that include categorically insignificant activities and aggregate insignificant activities, as defined in LRAPA title 12 and/or OAR 340-200-0020. For the most part, the standards that apply to IEUs are for opacity and particulate matter. 40 CFR 70.6(a)(3) of the federal Title V permit rules, requires all monitoring and analysis procedures or test methods required under applicable requirements be contained in Title V permits. In addition, where the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the facility's compliance with the permit. However, the requirements to include in a permit testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor with respect to all emissions units and applicable requirement situations. It does not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. Where compliance with the underlying applicable requirement for an insignificant emission unit is not threatened by a lack of a regular program of monitoring and where periodic testing or monitoring is not otherwise required by the applicable requirement, then in this instance the status quo (i.e., no monitoring) will meet Section 70.6(a)(3). For this reason, this permit includes limited requirements for categorically insignificant activities and aggregate insignificant activities.

FEDERAL REQUIREMENTS

Chemical Accident Prevention Provisions

31. The Title V permit includes standard language related to 40 CFR Part 68 – Chemical Accident Prevention Provisions. Should the material storage rate at this facility subject this facility to 40 CFR Part 68, the facility must satisfy all the applicable risk management requirements, including the development of a risk management plan.

New Source Performance Standards (NSPS)

32. The facility is not currently subject to New Source Performance Standards (40 CFR Part 60). The press heaters are not included in the definition of a boiler under the NSPS Subpart Dc regulations and are rated at less than 10 MMBtu/hr. In addition, both process heaters each have a maximum heat input value rating of less than 10 MMBtu/hour (9.4 MM Btu/hour as per manufacturer).

National Emission Standards for Hazardous Air Pollutants (NESHAP)

40 CFR part 63 subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

33. Plywood and Composite Wood Products (Subpart DDDD or 4D) is applicable to this facility and all requirements have been incorporated into the permit. The permittee complied with these requirements by October 1, 2007. The initial notification for this NESHAP was submitted on January 20, 2005. The cost of the new 4-ft wide LVL press project exceeds the 50% cost of a comparable new source and it is technologically feasible for the facility to meet the standards, therefore the facility will become a reconstructed source and is subject to the PCWP requirements for new sources. The requirements for the reconstructed source are the same as currently apply to the existing facility, which is the use of exclusively non-HAP coatings.

34. The initial statement that the source is using only non-HAP coatings for Group 1 Miscellaneous Coating Operations was received January 20, 2005. [40 CFR 63 Subpart DDDD; Table 6]

40 CFR part 63 subpart DDDD Citation	Description	Applicable to Source (Yes/No)	Comments	Permit Condition
63.2230	Purpose	Yes	None.	NA
63.2231	Applicability	Yes	None.	NA
63.2232	Affected sources	Yes	None.	NA
63.2233	Compliance dates	Yes	None.	NA
63.2240	Compliance options and operating requirements	No	None.	NA
63.2241	Work practice requirements	Yes	The permittee must use exclusively non-HAP coatings for Group 1 Miscellaneous Coating Operations	15,16
63.2250	General requirements	No	None.	NA
63.2251	Requirements for the routine control device maintenance exemption	No	None.	NA
63.2252	Requirements for process units that have no control or work practice requirements	No	None.	
63.2260	Initial compliance with the compliance options, operating requirements, and work practice requirements	No	None.	NA
63.2261	Performance tests or other initial compliance demonstrations	No	None.	NA

40 CFR part 63 subpart DDDD Citation	Description	Applicable to Source (Yes/No)	Comments	Permit Condition
63.2262	Conducting performance tests and establishing operating requirements	No	None.	NA
63.2263	Initial compliance for a dry rotary dryer	No	None.	NA
63.2264	Initial compliance for a hardwood veneer dryer	No	None.	NA
63.2265	Initial compliance for a softwood veneer dryer	No	None.	NA
63.2266	Initial compliance for a veneer dryer	No	None.	NA
63.2267	Initial compliance for a reconstituted wood product press or board cooler	No	None.	NA
63.2268	Initial compliance for a wet control device	No	None.	NA
63.2269	Monitoring installation, operation, and maintenance requirements	No	None.	NA
63.2270	Continuous compliance monitoring and data collection	No	None.	NA
63.2271	Continuous compliance with the compliance options, operating requirements, and work practice requirements	No	None.	NA
63.2280	Notifications	No	None.	NA
63.2281	Reports	No	None.	NA
63.2282	Records	Yes	None.	18
63.2283	Form and retention of records	No	None.	NA
63.2290	General Provision applicability	No	None.	NA
63.2291	Implementation and enforcement	No	None.	NA
63.2292	Definitions	Yes	None.	NA

40 CFR part 63 subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

35. Boilers and Process Heaters (Subpart DDDDD or 5D) is applicable to emissions units Press Heaters, each of which is rated at less than 10 MMBtu/hour heat input. The notification requirements were satisfied on January 30, 2009 and January 26, 2012, with a revision on December 10, 2013. The NESHAP requirements that are applicable to the existing press heaters at the facility are identified in the following table:

40 CFR Part 63, Subpart DDDDD citation	Description	Applicable to source (yes/no)	Comments	Permit condition
63.7480	Purpose	No	Informational	NA
63.7485	Subpart applicability	Yes	The press heaters are included in the definition of 'process heater' and the facility is or has the potential to be a major source of HAPs	32
63.7490	Affected source	Yes	(a)(2), (b), (c), and (e) are not applicable	32.a
63.7491	Exempt boilers and process heaters	No	There are no boilers at the facility and no process heaters at the facility that are exempt from the requirements	NA
63.7495	Compliance Dates	Yes, for existing process heaters	(a), (c), (e), (f), and (g) do not apply	32.a
63.7499	Subcategories	Yes	The press heaters are in the 'units designed to burn gas 1 fuels	32.a
63.7500(a)	Emission limits, work practice standards and operating limits	Yes	Table 1 does not apply to existing process heaters. Table 2 does not apply to existing process heaters designed to burn 'gas 1' fuels (natural gas). Table 3 contains the work practice standards that apply to the existing process heaters. All other emission limits in Tables 11 through 13 are not applicable.	32.b., 32.c
63.7500(b)	Alternative work practice standards	No	Facility has not requested EPA approve use of alternative work practice standards	NA
63.7500(c)	Limited-use boilers and process heaters	No	The process heaters are not included in the 'limited-use' category definition.	NA
63.7500(d)	Tune-up frequency	No	The process heaters at the facility are greater than 5 million Btu per hour and do not burn the fuels in the listed subcategories	NA
63.7500(e)	Tune-up frequency	Yes	Clarifies that the process heaters at the facility that are designed to burn gas 1 fuels are not subject to emission limits in Tables 1 and 2 or 11 through 13, or the operating limits in Table 4. Specifies that the process heaters at the facility rated at less than 10 MMBtu/hr are subject to a tune-up frequency as specified in 40 CFR 63.7540.	32.b
63.7500(f)	Standards apply at all times	No	No standard applies to existing process heaters in the gas 1 fuel subcategory.	NA
63.7501	[Reserved]	NA	[Reserved]	NA
63.7505	General requirements for complying with the subpart	Yes	Subsections (c) and (d) are not applicable because the process heaters are not subject to emission limits	32.d
63.7510	Initial compliance requirements	Yes	Subsection (e). Other sections do not apply since the process heaters are not in those fuel	32.a, 32.b, 32.c

40 CFR Part 63, Subpart DDDDD citation	Description	Applicable to source (yes/no)	Comments	Permit condition
			categories, are not new process heaters and/or have not ever combusted solid waste	
63.7515	Subsequent source tests, fuel analyses, or tune-ups	Yes	Subsection (d) tune-up frequency. All other sections do not apply because the process heaters do not have emission limits and/or are not in the subcategory	32.b
63.7520	Stack test procedures	No	Performance testing is not required since the process heaters do not have emission limits	NA
63.7521	Fuel analyses, fuel specification, and procedures	No	Fuel analyses, etc. are not required for process heaters combusting 'gas 1' fuels.	NA
63.7522	Emission averaging	No	The process heaters are not subject to an emission limit	NA
63.7525	Monitoring, installation, operation, and maintenance requirements	No	The process heaters are not subject to an emission limit and are not required to monitor pollutant data or process parameters.	NA
63.7530	Initial compliance with emission limitations, fuel specifications and work practice standards	Yes	Subsections (d) and (e). All other subsections do not apply because the process heaters are not subject to an emission limit.	32.g, 32.h
63.7533	Use of efficiency credits	No	Process heaters are not subject to emission limits and do not use emission and/or efficiency credits.	NA
63.7535	Minimum of monitoring data	No	This section is not applicable because the process heaters are not subject to an emission limit with associated monitoring.	NA
63.7540	Continuous compliance demonstration for emission limits, fuel specifications and work practice standards	Yes	Subsection (a)(12). The process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio. Tune-ups of the process heater must be conducted every 5 years.	32.b
63.7541	Continuous compliance under the emission averaging provision	No	This section is not applicable because the process heaters are not subject to an emission limit.	NA
63.7545	Notification requirements	Yes	Subsections (b), (c), and (d), are not applicable because the press heaters are existing process heaters without an emission limit and/or stack testing requirements.	33.f
63.7550	Reporting	Yes	Subsection (b) applies and allows compliance reporting every 5 years reflecting the 5-year tune-up schedule. Subsection (h)(3) applies and requires compliance reports be submitted electronically to EPA through their Central Data Exchange (CDX).	32.e, 32.i
63.7555	Recordkeeping	Yes	Subsection (b) through (g) are not applicable because the press heaters are existing process	32.j

40 CFR Part 63, Subpart DDDDD citation	Description	Applicable to source (yes/no)	Comments	Permit condition
			heaters without an emission limit and/or stack testing requirements.	
63.7560	Form and duration of recordkeeping	Yes	None	32.i
63.7565	Part 63 General Provisions	Yes	See Table 10 of subpart DDDDD to determine what general provisions apply to the facility.	NA
63.7570	Who implements standard	No	LRAPA is responsible for implementation of the standard.	NA
63.7575	Definitions	Yes	None	32

Compliance Assurance Monitoring

36. Title 40, part 64 of the Code of Federal Regulations (CFR) contains Compliance Assurance Monitoring (CAM) requirements. These regulations are also codified in LRAPA 35-0200 through 35-0280. CAM requirements apply to any Pollutant Specific Emissions Unit (PSEU) at a part 70 source that meets the following criteria:

    36.a. The unit is subject to an emission limitation or standard for a regulated air pollutant;

    36.b. The unit uses a control device to achieve compliance with that emission limitation or standard;

    36.c. The unit, by itself, has potential pre-control emissions of the regulated air pollutant that would make it a major source (i.e. greater than 100 tons per year for criteria pollutants; greater than 10 tons per year for individual Federal HAPs); and

    36.d. The exemptions in 40 CFR 64.2(b) and LRAPA 35-0200(2) do not apply. The exemptions include:

        36.d.i. Emission limitations or standards proposed by EPA after November 15, 1990 under section 111 (NSPS) or section 112 (NESHAPs);

        36.d.ii. Stratospheric ozone protection requirements under Title VI;

        36.d.iii. Acid Rain Program requirements;

        36.d.iv. Emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by US EPA;

        36.d.v. An emissions cap that meets the requirements in 40 CFR 70.4(b)(12);

        36.d.vi. Emission limitations or standards for which a part 70 permit specifies a continuous compliance demonstration method, as defined in 40 CFR 64.1 and LRAPA title 12; and

        36.d.vii. Municipally-owned backup utility emission units meeting the requirements under 40 CFR 64.2(b)(2).

37. An emission limitation or standard is defined under the Clean Air Act and in title 12 as a requirement which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement related to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under the Clean Air Act.

38. The following table evaluates CAM applicability for each significant emission unit at the facility:

Emission Unit	Uses a Control Device for a Regulated Pollutant	Pollutant	Uncontrolled Potential Emissions Exceed Major Source Threshold	Emission Limitation or Standard Applies for this Pollutant	Subject to CAM for the Pollutant
EU-WRH	Yes	PM	No	Yes	No
EU-Presses	No	NA	NA	NA	NA
EU-I-Line	No	NA	NA	NA	NA
EU-I-Oven	No	NA	NA	NA	NA
EU-Press Heaters	No	NA	NA	NA	NA
EU-WSO	No	NA	NA	NA	NA

PLANT SITE EMISSION LIMITS

39. Provided below is a summary of the baseline emissions rate, netting basis, plant site emission limit, and potential to emit.

Pollutant	Baseline Emission Rate (TPY)	Netting Basis		Plant Site Emission Limit (PSEL)		PTE (TPY)
		Previous (TPY)	Proposed (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)	
PM	23	23	23	24	4.3	4.3
PM_{10}	22	22	22	14	2.3	2.3
$PM_{2.5}$	NA	14	13	9	1.4	1.4
CO	1.2	1.2	1.2	99	6.6	6.6
NO_x	5.7	5.7	5.7	39	7.8	7.8
SO_2	<0.5	<0.5	<0.5	NA	NA	de minimis
VOC	53	53	53	67	66	66
GHG	4,146	4,146	4,146	74,000	9,356	9,356

39.a. The baseline emission rates for PM, PM_{10}, CO, NO_X, SO_2, and VOC were determined in previous permitting actions and there are no changes. The baseline emission rates are based upon actual estimated emission totals for the 1977 calendar year. Emissions are accounted from WRH, two (2) veneer dryers, one (1) oven, truck loading fugitives, three (3) presses, an I-line process, and aggregate insignificant activities. The detail sheets attached to this report contain the rates, factors and more information about the calculations. A baseline emission rate is not required for $PM_{2.5}$ in accordance with the definition of "baseline emission rate" in LRAPA Title 12.

39.b. The GHG baseline emission rate is based upon actual anthropogenic emissions from the 2005 calendar year and accounts for I-line oven and Press Heaters' natural gas combustion.

39.c. The netting basis for PM, PM_{10}, CO, NO_x, SO_2, VOC, and GHG were determined in previous permitting actions and there are no changes.

39.d. The netting basis for $PM_{2.5}$ was established in accordance with LRAPA 42-0046(2)(b). For PM2.5, a source's initial netting basis is equal to the overall $PM_{2.5}$ fraction of the PM_{10} PSEL in effect on May 1, 2011 multiplied by the PM_{10} netting basis in effect on May 1, 2011. The $PM_{2.5}$ netting basis has been updated in this permit renewal to reflect a recalculation of the $PM_{2.5}/PM_{10}$ ratio, which is provided in the emission detail sheets.

39.e. The PSEL for PM, PM_{10}, $PM_{2.5}$, CO, NO_X, and GHG are established at the potential to emit level in accordance with LRAPA 42-0041(3). No PSEL has been established for SO_2 because the facility emissions are below de minimis levels as defined in LRAPA Title 12.

39.f. The VOC PSEL is established (66 TPY) using the highest VOC content historically used in the adhesive and the EU-Presses projected production capacity for the 4-foot wide LVL press project. The VOC PSEL was reduced by one (1) ton per year in this permit renewal due to updated VOC emission factors (DEQ AQ-EF05) for natural gas combustion in EU-Press Heaters and EU-I-Line Oven.

SIGNIFICANT EMISSION RATE

40. The proposed PSEL increase over the baseline emissions is less than the Significant Emission Rate (SER) as defined in LRAPA Title 12 rules for all of the pollutants as shown below.

Pollutant	Proposed PSEL (TPY)	PSEL Increase Over Netting Basis (TPY)	PSEL Increase Due to Utilizing Existing Baseline Period Capacity (TPY)	PSEL Increase Due to Modification (TPY)	SER (TPY)
PM	4.3	0	0	0	25
PM_{10}	2.3	0	0	0	15
$PM_{2.5}$	1.4	0	0	0	10
CO	6.6	5.0	0	0	100
NO_x	7.8	2.0	0	0	40
VOC	66	13	0	0	40
SO_2	NA	NA	0	0	40
GHG	9356	5,210	0	0	75,000

UNASSIGNED EMISSIONS AND EMISSION REDUCTION CREDITS

41. The facility has Unassigned Emissions as shown below. The facility had Emission Reduction Credits (ERCs) that were established in the previous permitting term, which expired on April 2, 2016. The ERCs that were not used prior to the expiration date have been set to zero (0) and have become unassigned emissions for the purpose of the PSEL and are no longer available for use as external offsets. Unassigned emissions are established with this renewal and will be reduced to no more than the significant emission rate (SER) at the following renewal in accordance with LRAPA's Title 42 (Section 42-0055).

Pollutant	PSEL (TPY)	Previous Unassigned Emissions (TPY)	Proposed Unassigned Emissions (TPY)	Previous ERCs (TPY)	Proposed ERCs (TPY)
PM	4.3	19	19	0	0
PM_{10}	2.3	27	19	0	0
$PM_{2.5}$	1.4	17	12	0	0
CO	6.6	0	0	0	0
NO_x	7.8	16	0	0	0
SO_2	NA	0	0	0	0
VOC	66	0	0	0	0
GHG	9,356	0	0	0	0

NEW SOURCE REVIEW (NSR) AND PREVENTION OF SIGNIFICANT DETERIORATION (PSD)

42. This source is located in an area that is designated attainment or unclassified for all regulated pollutants. The proposed PSELs are less than the federal major source threshold for non-listed sources of 250 TPY per regulated pollutant and are not subject to Major NSR.

FEDERAL HAZARDOUS AIR POLLUTANTS (FHAP) AND TOXIC AIR CONAMINANTS (TAC)

43. Potential annual federal hazardous air pollutant (FHAP) emissions are based on the potential to emit of the facility operating under permit limitations. The highest single FHAP emitted by the facility is methanol at approximately 48.4 tons per year. The potential total FHAP emissions are 57.8 tons per year. A major source of FHAPs is defined as having potential FHAP emissions of at least 10 tons per year of any single HAP and 25 tons per year of the aggregate of all FHAPs. This facility does have potential FHAP emissions exceeding these thresholds and is considered a major source of FHAPs.

44. Under the Cleaner Air Oregon program, only existing sources that have been notified by LRAPA and new sources are required to perform risk assessments. This source has not been notified by LRAPA and is therefore, not yet required to perform a risk assessment or report annual emissions of toxic air contaminants. LRAPA required reporting of approximately 600 toxic air contaminants in 2016 and regulates approximately 260 toxic air contaminants that have Risk Based Concentrations established in rule. All 187 hazardous air pollutants are on the list of approximately 600 toxic air contaminants. The hazardous air pollutants and toxic air contaminants listed below were reported by the source in 2016 and verified by LRAPA. After the source is notified by LRAPA, they must update their inventory and perform a risk assessment to see if they must reduce risk from their toxic air contaminant emissions. Until then, sources will be required to report toxic air contaminant emissions triennially.

45. The emissions total below reflect the most current information available for the facility, including information provided in the Cleaner Air Oregon 2016 and 2023 Emissions Inventory submissions.

46. The table below represents the potential emissions of FHAP from the facility, excluding potential emissions from categorically insignificant Activities.

CAS#/DEQ#	Pollutant	PTE (TPY)	FHAP	CAO TAC
75-07-0	Acetaldehyde	2.16	Yes	Yes
7440-38-2	Arsenic	1.72E-05	Yes	Yes
71-43-2	Benzene	1.64E-04	Yes	Yes
7440-41-7	Beryllium	9.37E-07	Yes	Yes
7440-43-9	Cadmium	8.59E-05	Yes	Yes
25321-22-6	Dichlorobenzene	9.37E-05	Yes	Yes
7440-48-4	Cobalt	6.56E-06	Yes	Yes
50-00-0	Formaldehyde	5.25	Yes	Yes
206-44-0	Fluoranthene (PAH)	2.34E-07	Yes	Yes
86-73-7	Fluorene (PAH)	2.19E-07	Yes	Yes
110-54-3	Hexane	0.141	Yes	Yes
7439-92-1	Lead	3.91E-05	Yes	Yes
7439-96-5	Manganese	2.97E-05	Yes	Yes
7439-97-6	Mercury	2.03E-05	Yes	Yes
67-56-1	Methanol	48.4	Yes	Yes
1313-99-1	Nickel oxide	1.64E-04	Yes	Yes
91-57-6	2-Methyl naphthalene (PAH)	1.87E-06	Yes	Yes
91-20-3	Naphthalene	4.77E-05	Yes	Yes
85-01-8	Phenanthrene (PAH)	1.33E-06	Yes	Yes
129-00-0	Pyrene (PAH)	3.91E-07	Yes	Yes
108-95-2	Phenol	1.80	Yes	Yes
123-38-6	Propionaldehyde	0.019	Yes	Yes
108-88-3	Toluene	2.66E-04	Yes	Yes
7440-47-3	Chromium	1.09E-04	Yes	Yes
	Total HAPs (tons per year)		**57.8**	**57.8**

TOXICS RELEASE INVENTORY (TRI)

47. The Toxics Release Inventory (TRI) is a federal program that tracks the management of certain toxic chemicals that may pose a threat to human health and the environment, over which LRAPA has no regulatory authority. It is a resource for learning about toxic chemical releases and pollution prevention activities reported by certain industrial facilities. Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) created the TRI Program. In general, chemicals covered by the TRI Program are those that cause:

- Cancer or other chronic human health effects;
- Significant adverse acute human health effects;
- Significant adverse environmental effects.

There are currently over 650 chemicals covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual TRI reports on each

chemical. NOTE: The TRI Program is a federal program over which LRAPA has no regulatory authority. LRAPA does not guarantee the accuracy of any information copied from EPA's TRI website.

In order to report emissions to the TRI program, a facility must operate under a reportable NAICS code, meet a minimum employee threshold, and manufacture, process, or otherwise use chemicals in excess of the applicable reporting threshold for the chemical. The facility has reported the following emissions since the last permit issuance in 2021.

Reporting Year	Pollutant	Cas No.	Emissions (lbs)	Applicable Reporting Threshold (lbs)
2021	Phenol	108-95-2	488	10,000
2022	Phenol	108-95-2	423	10,000
2023	Phenol	108-95-2	373	10,000
2024	Phenol	108-95-2	250	10,000

COMPLIANCE HISTORY

48. Pursuant to the requirements of Condition 14 of LRAPA Title V Operating Permit No. 208256 in effect at the time and LRAPA 33-060-3A(2) [currently LRAPA 33-060(3)(a)(B)], the facility began performing weekly visible emissions tests using EPA Method 9 in July 1997. Based on the results of these tests, it was determined that the facility was not in compliance with the visible emission standard on several occasions after July 1997. LRAPA issued a Notice of Noncompliance (NON) in October 1997 which required the facility to come into continuous compliance with the standard. On December 18, 1997, LRAPA issued Stipulated Final Order (SFO) No. 97-1427 with the goal of establishing conditions and a schedule to require the facility to operate in compliance with the standard.

49. Condition 16.b of the SFO stated the following: "If TJM [Trus Joist MacMillan – the facility name at the time] determines for one or more of the dryers that process and maintenance procedures are insufficient to ensure compliance . . . TJM shall issue purchase orders for control equipment appropriate to ensure compliance . . . A description of the controls selected and a construction schedule shall be submitted . . .. In no event shall the final completion date be later than May 15, 1999."

50. Pursuant to condition 16.b of the SFO, the facility determined that add-on controls were necessary to ensure compliance with the opacity standard. The facility selected a 37,000 scfm regenerative thermal oxidizer (RTO) as the preferred control method and submitted a Notice of Approval to Construct application to LRAPA on July 15, 1998. To allow the facility to begin building the control device as soon as possible, LRAPA issued a conditional Notice of Approval to Construct the device on September 14, 1998. The Notice only authorized construction of the RTO and prohibited any physical connection to a fuel supply or to the dryers themselves.

51. The facility received LRAPA approval for the removal of the veneer dryers and the modified RTO (T=RTO-1) on November 6, 2006 by way of Approval to Construct NC-208256-C06 and a notice of completion was submitted by the facility on January 18, 2008. The completion notice indicated the two (2) dryers and RTO were removed on April 21, 2007. An Administrative Amendment was submitted by the facility to remove the dryers and RTO and the previous permit renewal (2008) reflected the removal of the veneer dryers and RTO.

52. As of the date of this permit issuance, there are no open enforcement actions or non-compliances for this facility.

53. This facility is regularly inspected by LRAPA and occasionally by other regulatory agencies. The following table indicates the inspection history of this facility since the last permit issuance in 2021:

Type of Inspection	Date	Results
Full Compliance Evaluation	03/26/2021	In Compliance
Full Compliance Evaluation	05/08/2023	In Compliance
Full Compliance Evaluation	05/20/2025	In Compliance

TITLE V OPERATING PERMIT CHANGE LOG

54. The following is a list of changes between the previous permit and the current permit:

New Permit Condition Number	Old Permit Condition Number	Description of change	Reason for change
Most	Most	Updated and corrected rule references; Updated language	LRAPA rule changes, typos, etc.
44	36	Updated Plant Site Emission Limits	LRAPA rule change, PSELs must be set to PTE
General Conditions	General Conditions	Updated to revised Title V General Conditions	LRAPA and OAR rule changes

SOURCE TEST RESULTS

55. This facility has conducted various source tests to comply with permit requirements. The table below shows the results of the test reports on file at LRAPA.

Emission Device	Test Date	Production Rate During the Test	Results
Baghouse #1	December 2, 1999	Actual Flow Rate = 53,900 acf/min	PM Concentration = 0.0007 gr/dscf Opacity = 0%
Baghouse #1	May 5, 1998	Actual Flow Rate= 71,000 acf/min	PM Concentration = 0.00041 gr/scfd Opacity = 0%

56. The facility is not required to conduct performance testing because emissions can be reasonably estimated using industry-specific emissions factors. LRAPA is not aware of any performance testing conducted at this facility.

GENERAL TESTING REQUIREMENTS

57. This section is provided so that the permittee and LRAPA will know what test methods should be used to measure pollutant emissions in the event that testing is conducted for any reason. This section does not by itself require the permittee to conduct any more testing than was previously included in the permit. Although the permit may not require testing because other routine monitoring is used to determine compliance, LRAPA and EPA always have the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntary conduct testing to confirm the compliance status. In either case, the methods to be used for testing in the event that testing is conducted are included in the permit. This is true for SIP as well as NSPS emission limits and standards.

RECORDKEEPING REQUIREMENTS

58. The permit includes requirements for maintaining records of all testing, monitoring, and production information necessary for assuring compliance with the standards and calculating plant site emissions. The records of all monitoring specified in the Title V Operation Permit must be kept at the plant site for at least five (5) years.

REPORTING REQUIREMENTS

59. The permit includes a requirement for submitting semi-annual and annual monitoring reports that include semi-annual compliance certifications. Excess emissions are required to be reported to LRAPA immediately as well as in a logbook attached to the annual report. Emissions fees reports are required annually.

PUBLIC NOTICE

60. The proposed permit will be on public notice from July 30, 2026 to September 3, 2026. Written comments may be submitted during this public comment period. If requested by ten (10) or more individuals or an individual representing a group of more than ten (10) individuals, LRAPA will schedule a public hearing on the proposed permit action. LRAPA will provide a minimum of 30 days notice for a public hearing. After the comment period and hearing (if requested), LRAPA will respond to comments received and then take final action to issue or deny the permit.

EPA REVIEW

61. A proposed permit will be sent to EPA for a 45-day review period after the public comment period. LRAPA may request and EPA may agree to an expedited review if there are no substantive or adverse comments during the comment period. If the EPA does not object in writing, any person may petition the EPA within 60 days after the expiration of EPA's 45-day review period to make such objection. Any such petition must be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided for in OAR 340-218-0210, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.

MM/JM
07/17/2026

EMISSIONS DETAIL SHEETS

Pollutant	Emission Unit	Annual Production/Process Rate		Emissions Factor			Emissions
		Rate	Units	Rate	Units	Reference	tons/yr
PM	EU-WRH: Cyclones w/ Baghouses	71,671	BDT/yr	0.001	lb/BDT	DEQ AQ-EF02	0.04
	EU-WRH: Truck Loading Fugitives	71,671	BDT/yr	0.086	lb/BDT	AP-42 Table 9.9.1-1	3.1
	EU-I-Oven: I-Line Oven	58.24	MMscf/yr	2.5	lb/MMscf	DEQ AQ-EF05	0.07
	EU-Press Heaters: Press Heaters	98	MMscf/yr	2.5	lb/MMscf	DEQ AQ-EF05	0.12
	EU-AI: Aggregate Insignificant						1
						Total PM	**4.3**
PM_{10}	EU-WRH: Cyclones w/ Baghouses	71,671	BDT/yr	0.001	lb/BDT	DEQ AQ-EF02	0.04
	EU-WRH: Truck Loading Fugitives	71,671	BDT/yr	0.029	lb/BDT	AP-42 Table 9.9.1-1	1.0
	EU-I-Oven: I-Line Oven	58.24	MMscf/yr	2.5	lb/MMscf	DEQ AQ-EF05	0.07
	EU-Press Heaters: Press Heaters	98	MMscf/yr	2.5	lb/MMscf	DEQ AQ-EF05	0.12
	EU-AI: Aggregate Insignificant						1
						Total PM_{10}	**2.3**
$PM_{2.5}$	EU-WRH: Cyclones w/ Baghouses	71,671	BDT/yr	0.001	lb/BDT	DEQ EF-08, $PM_{2.5}/PM_{10}$=1	0.04
	EU-WRH: Truck Loading Fugitives	71,671	BDT/yr	0.0049	lb/BDT	AP-42 Table 9.9.1-1	0.18
	EU-I-Oven: I-Line Oven	58.24	MMscf/yr	2.5	lb/BDT	DEQ AQ-EF05, $PM_{2.5}/PM_{10}$=1	0.07
	EU-Press Heaters: Press Heaters	98	MMscf/yr	2.5	lb/BDT	DEQ AQ-EF05, $PM_{2.5}/PM_{10}$=1	0.12
	EU-AI: Aggregate Insignificant						1
						Total $PM_{2.5}$	**1.4**
SO_2	EU-I-Oven: I-Line Oven	58.24	MMscf/yr	1.7	lb/MMscf	DEQ AQ-EF05	0.05
	EU-Press Heaters: Press Heaters	98	MMscf/yr	2.6	lb/MMscf	DEQ AQ-EF05	0.13
						Total SO_2	**0.18**
NO_x	EU-I-Oven: I-Line Oven	58.24	MMscf/yr	100	lb/MMscf	DEQ AQ-EF05	2.9
	EU-Press Heaters: Press Heaters	98	MMscf/yr	100	lb/MMscf	DEQ AQ-EF05	4.9
						Total NO_x	**7.8**
CO	EU-I-Oven: I-Line Oven	58.24	MMscf/yr	84	lb/MMscf	DEQ AQ-EF05	2.4
	EU-Press Heaters: Press Heaters	98	MMscf/yr	84	lb/MMscf	DEQ AQ-EF05	4.1
						Total CO	**6.6**
VOC	EU-Presses: LVL Presses	41,795,712	lbs/yr	0.0027	lb/lb	Momentive test data (heated sealed caul plate test data)	56.4
	EU-I-Line: I-Line Process	3,147,756	lb/yr	0.004	lb/lb	Momentive test data (heated sealed caul plate test data)	6.3
	EU-WSO: Watershed Overlay Process	2,000,000	cf/yr	0.0020426	lb/cf	Arclin test data	2.0
	EU-I-Oven: I-Line Oven	58	MMscf/yr	6	lb/MMscf	DEQ AQ-EF05	0.2
	EU-Press Heaters: Press Heaters	98	MMscf/yr	6	lb/MMscf	DEQ AQ-EF05	0.3
	EU-AI: Aggregate Insignificant						1
						Total VOC	**66.0**

BASELINE EMISSION RATES EMISSIONS DETAIL SHEET

Pollutant	Emission Unit	Annual Production/Process Rate		Emissions Factor			Emissions
		Rate	Units	Rate	Units	Reference	tons/yr
PM	Wood Residuals Handling System						
	Cyclone No. 1	6,725	BDT/yr	0.5	lb/BDT	DEQ	1.7
	Baghouse No. 1	4,484	BDT/yr	0.001	lb/BDT	DEQ	0.002
	Truck Loading Fugitives	11,209	BDT/yr	0.086	lb/BDT	AP-42	0.48
	I-Line Combustion	23.5	MMcf/yr	12	lb/MMcf	DEQ	0.14
	Veneer Drying (2 units)	2,338,738	cu ft/yr	0.01664	lb/cf	DEQ	19.5
	EU-AI: Aggregate Insignificant						1
						Total PM	**22.8**
PM_{10}	Wood Residuals Handling System						
	Cyclone No. 1	6,725	BDT/yr	0.25	lb/BDT	DEQ	0.84
	Baghouse No. 1	4,484	BDT/yr	0.001	lb/BDT	DEQ	0.002
	Truck Loading Fugitives	11,209	BDT/yr	0.029	lb/BDT	AP-42	0.16
	I-Line Combustion	24	MMcf/yr	12	lb/MMcf	DEQ	0.14
	Veneer Drying (2 units)	2,338,738	cu ft/yr	0.01664	lb/cf	DEQ	19.5
	EU-AI: Aggregate Insignificant						1
						Total PM_{10}	**21.6**
SO_2	I-Line Combustion	23.5	MMcf/yr	0.6	lb/MMcf	DEQ Factor	0.01
	Veneer Drying (2 units)	2,338,738	cu ft/yr	0.00002	lb/cu ft	DEQ Factor	0.02
						Total SO_2	**0.030**
NO_x	I-Line Combustion	23.5	MMcf/yr	100	lb/MMcf	DEQ Factor	1.2
	Veneer Drying (2 units)	2,338,738	cu ft/yr	0.00384	lb/cu ft	DEQ Factor	4.5
						Total NO_x	**5.7**
CO	I-Line Combustion	23.5	MMcf/yr	40	lb/MMcf	DEQ Factor	0.47
	Veneer Drying (2 units)	2,338,738	cu ft/yr	0.00064	lb/cu ft	DEQ Factor	0.75
						Total CO	**1.2**
VOC	I-Line Combustion	23.5	MMcf/yr	11	lb/MMcf	DEQ Factor	0.13
	Veneer Drying (2 units)	2,338,738	cu ft/yr	0.00704	lb/cu ft	DEQ Factor	8.2
	I-Line Process	474,460	lb adhesive/yr	0.0088	lb/lb adhesive	Borden Tests (6/96)	2.1
	Presses (1, 2 &3)	9,146,025	lb adhesive/yr	0.009	lb/lb adhesive	Borden Tests (6/96)	41.2
	EU-AI: Aggregate Insignificant						1
						Total VOC	**52.6**

GREENHOUSE GAS PTE AND BASELINE EMISSION DETAIL SHEET

GHG Potential to Emit (PTE)

Emission Unit	Annual Production or Process Rate		Emissions Factor			Emissions
	Rate	Units	Rate	Units	Reference	metric tons/yr
EU-I-Oven: I-Line Oven	58.24	MMscf/yr	53.06	kg CO2/mmBtu	Table C-1 to Subpart C of 40 CFR Part 98	3171
			0.001	kg CH4/MMBtu	Table C-2 to Subpart C of 40 CFR Part 98	0.1
			0.0001	kg N2O/MMBtu	Table C-2 to Subpart C of 40 CFR Part 98	0.01
EU-Press Heaters: Press Heaters	98	MMscf/yr	53.06	kg CO2/mmBtu	Table C-1 to Subpart C of 40 CFR Part 98	5335
			0.001	kg CH4/MMBtu	Table C-2 to Subpart C of 40 CFR Part 98	0.1
			0.0001	kg N2O/MMBtu	Table C-2 to Subpart C of 40 CFR Part 98	0.01
					Total GHG (metric tons)	**8506**
					Total GHG (short tons)	**9356**

GHG 2005 Baseline

Emission Unit	Annual Production or Process Rate		Emissions Factor			Emissions
	Rate	Units	Rate	Units	Reference	metric tons/yr
EU-I-Oven: I-Line Oven	10.03	MMscf/yr	53.06	kg CO2/mmBtu	Table C-1 to Subpart C of 40 CFR Part 98	546.3
			0.001	kg CH4/MMBtu	Table C-2 to Subpart C of 40 CFR Part 98	0.01
			0.0001	kg N2O/MMBtu	Table C-2 to Subpart C of 40 CFR Part 98	0.001
EU-Press Heaters: Press Heaters	59.20	MMscf/yr	53.06	kg CO2/mmBtu	Table C-1 to Subpart C of 40 CFR Part 98	3222.7
			0.001	kg CH4/MMBtu	Table C-2 to Subpart C of 40 CFR Part 98	0.1
			0.0001	kg N2O/MMBtu	Table C-2 to Subpart C of 40 CFR Part 98	0.01
					Total GHG (metric tons)	**3769**
					Total GHG (short tons)	**4146**

$PM_{2.5}$ NETTING BASIS EMISSION DETAIL SHEET

Emission Unit	Annual Production/ Process Rate		PM_{10} Emissions Factor		$PM_{2.5}$ Fraction	Reference	$PM_{2.5}$ Emissions Factor		PM_{10} Emissions	$PM_{2.5}$ Emissions
	Rate	Units	Rate	Units					tons/yr	
EU-WRH: Cyclones w/ Baghouses	71,671	BDT/yr	0.001	lb/BDT	1	DEQ EF-08	0.001	lb/BDT	0.04	0.04
EU-WRH: Truck Loading Fugitives	71,671	BDT/yr				AP-42 Table 9.9.1-1	0.0049	lb/BDT	1.04	0.18
EU-I-Oven: I-Line Oven	58.24	MMscf/yr	2.5	lb/MMscf	1	DEQ AQ-EF05	2.5	lb/BDT	0.07	0.07
EU-Press Heaters: Press Heaters	98	MMscf/yr	2.5	lb/MMscf	1	DEQ AQ-EF05	2.5	lb/BDT	0.12	0.12
EU-AI: Aggregate Insignificant									1	1
								Total	**2.3**	**1.4**

HAZARDOUS AIR POLLUTANT PTE/PSEL EMISSIONS DETAIL SHEET

Pollutant	Emissions Unit ID or Activity	Maximum Production or Process Rate		Emissions Factor			Maximum Projected Emissions
		Rate	Units	Rate	Units	Reference	tons/year
Acetaldehyde	Presses - LVL based	14,927	MCF LVL	2.90E-01	lb/MCF LVL	AP-42, Table 10.9-6	2.16E+00
Arsenic	I Line Oven and Press heater	156.24	MMCF nat. gas	2.00E-04	lb/MMCF	AP-42, Table 1.4-4	1.56E-05
Benzene	I Line Oven and Press heater	156.24	MMCF nat. gas	2.10E-03	lb/MMCF	AP-42, Table 1.4-3	1.64E-04
Beryllium	I Line Oven and Press heater	156.24	MMCF nat. gas	1.20E-05	lb/MMCF	AP-42, Table 1.4-4	9.37E-07
Cadmium	I Line Oven and Press heater	156.24	MMCF nat. gas	1.10E-03	lb/MMCF	AP-42, Table 1.4-4	8.59E-05
Dichlorobenzene	I Line Oven and Press heater	156.24	MMCF nat. gas	1.20E-03	lb/MMCF	AP-42, Table 1.4-3	9.37E-05
Cobalt	I Line Oven and Press heater	156.24	MMCF nat. gas	8.40E-05	lb/MMCF	AP-42, Table 1.4-4	6.56E-06
Copper*	I Line Oven and Press heater	156.24	MMCF nat. gas	8.50E-04	lb/MMCF	AP-42, Table 1.4-4	6.64E-05
Formaldehyde	Presses - resin based	41,795,712	lb resin	2.00E-04	lb/lb resin	Sealed caul plate test	4.18E+00
	I-Line	3,147,756	lb resin	6.00E-04	lb/lb resin	Sealed caul plate test	9.44E-01
	I Line Oven and Press heater	156.24	MMCF nat. gas	7.50E-02	lb/MMCF	AP-42, Table 1.4-3	5.86E-03
	WSO	2,000,000	cf/yr	1.16E-04	lb/cf LVL	Sealed caul plate test	1.16E-01
						Total Formaldehyde	**5.25**
Fluoranthene (PAH)	I Line Oven and Press heater	156.24	MMCF nat. gas	3.00E-06	lb/MMCF	AP-42, Table 1.4-3	2.34E-07
Fluorene (PAH)	I Line Oven and Press heater	156.24	MMCF nat. gas	2.80E-06	lb/MMCF	AP-42, Table 1.4-3	2.19E-07
Hexane	I Line Oven and Press heater	156.24	MMCF nat. gas	1.8	lb/MMCF	AP-42, Table 1.4-3	1.41E-01
Lead	I Line Oven and Press heater	156.24	MMCF nat. gas	5.00E-04	lb/MMCF	AP-42, Table 1.4-2	3.91E-05
Manganese	I Line Oven and Press heater	156.24	MMCF nat. gas	3.80E-04	lb/MMCF	AP-42, Table 1.4-4	2.97E-05
Mercury	I Line Oven and Press heater	156.24	MMCF nat. gas	2.60E-04	lb/MMCF	AP-42, Table 1.4-4	2.03E-05
Methanol	Presses - resin based	41,795,712	lb resin	2.10E-03	lb/lb resin	Sealed caul plate test	4.39E+01
	I-Line	3,147,756	lb resin	4.00E-04	lb/lb resin	Sealed caul plate test	6.30E-01
	WRH	14,927,040	CF LVL	3.00E-04	lb/CF LVL	Plywood baghouse test	2.24E+00
	WSO	2,000,000	cf/yr	1.65E-03	lb/cf LVL	Sealed caul plate test	1.65E+00
						Total Methanol	**48.4**
Nickel oxide	I Line Oven and Press heater	156.24	MMCF nat. gas	2.10E-03	lb/MMCF	AP-42, Table 1.4-4	1.64E-04
2-Methyl naphthalene (PAH)	I Line Oven and Press heater	156.24	MMCF nat. gas	2.40E-05	lb/MMCF	AP-42, Table 1.4-3	1.87E-06
Naphthalene	I Line Oven and Press heater	156.24	MMCF nat. gas	6.10E-04	lb/MMCF	AP-42, Table 1.4-3	4.77E-05
Phenanthrene (PAH)	I Line Oven and Press heater	156.24	MMCF nat. gas	1.70E-05	lb/MMCF	AP-42, Table 1.4-3	1.33E-06
Pyrene (PAH)	I Line Oven and Press heater	156.24	MMCF nat. gas	5.00E-06	lb/MMCF	AP-42, Table 1.4-3	3.91E-07
Phenol	Presses - resin based	41,795,712	lb resin	5.00E-06	lb/lb resin	Sealed caul plate test	1.04E-01
	I-Line	3,147,756	lb resin	9.00E-04	lb/lb resin	Sealed caul plate test	1.42E+00
	WSO	2,000,000	cf/yr	2.77E-04	lb/cf LVL	Sealed caul plate test	2.77E-01
						Total Phenol	**1.80**
Propionaldehyde	Presses - LVL based	156.24	MCF LVL	2.40E-01	lb/MCF LVL	AP-42, Table 10.9-6	1.87E-02
Toluene	I Line Oven and Press heater	156.24	MMCF nat. gas	3.40E-03	lb/MMCF	AP-42, Table 1.4-3	2.66E-04
Zinc oxide*	I Line Oven and Press heater	156.24	MMCF nat. gas	2.90E-02	lb/MMCF	AP-42, Table 1.4-4	2.27E-03
Chromium	I Line Oven and Press heater	156.24	MMCF nat. gas	1.40E-03	lb/MMCF	AP-42, Table 1.4-4	1.09E-04
						Total HAP	**57.8**

*Cleaner Air Oregon (OAR 340-245) air toxics, not included in HAP total

AGGREGATE INSIGNIFICANT ACTIVITIES

Aggregate insignificant emissions from activities identified by the permittee are detailed in the following table:

Emissions Source	Pollutants (lbs/yr)			
	PM	PM_{10}	$PM_{2.5}$	VOC
Misc. Adhesive Usage	NA	NA	NA	0.056
Misc. Aerosol Paint Cans	NA	NA	NA	272
Misc. Thinner	NA	NA	NA	50
Misc. Enamel Paint	NA	NA	NA	0.036
Misc. Inks	NA	NA	NA	100
Carpentry Shop	50	50	50	NA
Press Lube	450	450	450	NA
Miscellaneous Hand Tool Use	50	50	50	NA
Fire Suppression Abort System	365	183	183	NA
Sawdust Dumpsters	25	25	25	NA
Billet Reclaim Saw	50	50	50	NA
Totals	**990**	**808**	**808**	**422**

CURRENT PLANT SITE PRODUCTION

The plant can be operated as much as 24 hours per day, 7 days per week, and 52 weeks per year. The production rates used as a basis for determining the PSELs are as follows:

Production or Process Parameter	Period	Rate	Units
LVL production and wood I-Joist production	LVL Production	14,927,040	cu ft/yr
	LVL Adhesive usage	41,795,712	lbs/yr
	I-line Adhesive usage	3,147,756	lbs/yr
	WSO Process	2,000,000	cu ft/yr